

HARNESS, DICKEY & PIERCE, P.L.C.

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To: U.S. Patent & Trademark Office From: Thomas S. Auchterlonie

Fax: 571-273-8300 Date: July 21, 2006

Pages: 18 (including cover sheet)

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Applicant: Babak HASSIBI, et al.	Case No.: 29250-000636/US
Serial No.: 10/077,849	Filing Date: February 20, 2002
Title: CAYLEY-ENCODATION OF UNITARY MATRICES FOR DIFFERENTIAL COMMUNICATION	
Please acknowledge receipt of:	
<ul style="list-style-type: none"> • Transmittal • Fee Transmittal • Amendment • Exhibit 	
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Due: 2006-07-24	Atty: TSA/cm Date Filed: 07-21-2006

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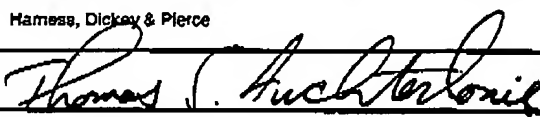
Approved for use through 07/31/2008. OMB 0851-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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TRANSMITTAL FORM <small>(to be used for all correspondence after initial filing)</small>	Application Number	10/077,849
	Filing Date	February 20, 2002
	First Named Inventor	Babak HASSIBI et al.
	Art Unit	2611
	Examiner Name	Lawrence B. Williams
Total Number of Pages in This Submission	Attorney Docket Number	29250-000636/US

ENCLOSURES (check all that apply)		
<input checked="" type="checkbox"/> For Transmittal Form <input type="checkbox"/> Fee Attached <input checked="" type="checkbox"/> Amendment / Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) ____ <input type="checkbox"/> Landscape Table on CD	<input type="checkbox"/> After Allowance Communication to TC <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): Exhibit
Remarks Mail Stop: AMENDMENT		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT			
Firm	Harness, Dickey & Pierce		
Signature			
Printed Name	Thomas S. Auchterlonie		
Date	July 21, 2006	Reg. No.	37,275

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<h2 style="margin: 0;">FEE TRANSMITTAL for FY 2006</h2> <p style="font-size: small; margin: 5px 0;">Effective 2/8/2006. Patent fees are subject to annual revision.</p> <p><input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27</p>		<p><i>Complete if Known</i></p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr><td>Application Number</td><td>10/077,849</td></tr> <tr><td>Filing Date</td><td>February 20, 2002</td></tr> <tr><td>First Named Inventor</td><td>Babak HASSIBI et al.</td></tr> <tr><td>Examiner Name</td><td>Lawrence B. Williams</td></tr> <tr><td>Art Unit</td><td>2611</td></tr> <tr><td>Attorney Docket No.</td><td>29250-000636/US</td></tr> </table>		Application Number	10/077,849	Filing Date	February 20, 2002	First Named Inventor	Babak HASSIBI et al.	Examiner Name	Lawrence B. Williams	Art Unit	2611	Attorney Docket No.	29250-000636/US
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TOTAL AMOUNT OF PAYMENT (\$) 120															

<p>METHOD OF PAYMENT (check all that apply)</p> <p> <input type="checkbox"/> Check <input type="checkbox"/> Credit card <input type="checkbox"/> Money Order <input type="checkbox"/> Other <input type="checkbox"/> None </p> <p><input checked="" type="checkbox"/> Deposit Account:</p> <table style="width:100%;"> <tr> <td style="width: 30%;">Deposit Account Number</td> <td>08-0750</td> </tr> <tr> <td>Deposit Account Name</td> <td>Hamees, Dickey & Pierce, PLC</td> </tr> </table> <p>The Director is authorized to: (check all that apply)</p> <p> <input checked="" type="checkbox"/> Charge fee(s) indicated below <input checked="" type="checkbox"/> Credit any overpayments <input checked="" type="checkbox"/> Charge any additional fee(s) during the pendency of this application <input type="checkbox"/> Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account. </p>				Deposit Account Number	08-0750	Deposit Account Name	Hamees, Dickey & Pierce, PLC	<p>FEE CALCULATION (continued)</p> <p>3. ADDITIONAL FEES</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2">Large Entity</th> <th colspan="2">Small Entity</th> <th rowspan="2">Fee Description</th> <th rowspan="2">Fee Paid</th> </tr> <tr> <th>Fee Code</th> <th>Fee (\$)</th> <th>Fee Code</th> <th>Fee (\$)</th> </tr> </thead> <tbody> <tr><td>1051</td><td>130</td><td>2051</td><td>85</td><td>Surcharge - late filing fee or oath</td><td></td></tr> <tr><td>1052</td><td>50</td><td>2052</td><td>25</td><td>Surcharge - late provisional filing fee or cover sheet</td><td></td></tr> <tr><td>1053</td><td>130</td><td>1053</td><td>130</td><td>Non-English specification</td><td></td></tr> <tr><td>1812</td><td>2,520</td><td>1812</td><td>2,520</td><td>For filing a request for reexamination</td><td></td></tr> <tr><td>1804</td><td>920*</td><td>1804</td><td>920*</td><td>Requesting publication of SIR prior to Examiner action</td><td></td></tr> <tr><td>1805</td><td>1,840*</td><td>1805</td><td>1,840*</td><td>Requesting publication of SIR after Examiner action</td><td></td></tr> <tr><td>1251</td><td>120</td><td>2251</td><td>60</td><td>Extension for reply within first month</td><td>120</td></tr> <tr><td>1252</td><td>450</td><td>2252</td><td>225</td><td>Extension for reply within second month</td><td></td></tr> <tr><td>1253</td><td>1020</td><td>2253</td><td>510</td><td>Extension for reply within third month</td><td></td></tr> <tr><td>1254</td><td>1,590</td><td>2254</td><td>795</td><td>Extension for reply within fourth month</td><td></td></tr> <tr><td>1255</td><td>2,160</td><td>2255</td><td>1080</td><td>Extension for reply within fifth month</td><td></td></tr> <tr><td>1401</td><td>600</td><td>2401</td><td>250</td><td>Notice of Appeal</td><td></td></tr> <tr><td>1402</td><td>500</td><td>2402</td><td>250</td><td>Filing a brief in support of an appeal</td><td></td></tr> <tr><td>1403</td><td>1000</td><td>2403</td><td>500</td><td>Request for oral hearing</td><td></td></tr> <tr><td>1452</td><td>500</td><td>2452</td><td>250</td><td>Petition to revive - unavoidable</td><td></td></tr> <tr><td>1453</td><td>1500</td><td>2453</td><td>750</td><td>Petition to revive - unintentional</td><td></td></tr> <tr><td>1462</td><td>400</td><td>1462</td><td>400</td><td>Petition fee under 37 CFR 1.17(f)</td><td></td></tr> <tr><td>1463</td><td>200</td><td>1463</td><td>200</td><td>Petition fee under 37 CFR 1.17(g)</td><td></td></tr> <tr><td>1464</td><td>130</td><td>1464</td><td>130</td><td>Petition fee under 37 CFR 1.17(h)</td><td></td></tr> <tr><td>1807</td><td>50</td><td>1807</td><td>50</td><td>Processing fee under 37 CFR 1.17 (q)</td><td></td></tr> <tr><td>1808</td><td>180</td><td>1808</td><td>180</td><td>Submission of Information Disclosure Stmt</td><td></td></tr> <tr><td>8021</td><td>40</td><td>8021</td><td>40</td><td>Recording each patent assignment per property (times number of properties)</td><td></td></tr> <tr><td>1809</td><td>790</td><td>2809</td><td>395</td><td>Filing a submission after final rejection (37 CFR § 1.129(a))</td><td></td></tr> <tr><td>1810</td><td>790</td><td>2810</td><td>395</td><td>For each additional invention to be examined (37 CFR § 1.129(b))</td><td></td></tr> <tr><td>1801</td><td>790</td><td>2801</td><td>395</td><td>Request for Continued Examination (RCE)</td><td></td></tr> </tbody> </table> <p>Other fee (specify) _____</p> <p>*Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$120)</p>				Large Entity		Small Entity		Fee Description	Fee Paid	Fee Code	Fee (\$)	Fee Code	Fee (\$)	1051	130	2051	85	Surcharge - late filing fee or oath		1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet		1053	130	1053	130	Non-English specification		1812	2,520	1812	2,520	For filing a request for reexamination		1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action		1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action		1251	120	2251	60	Extension for reply within first month	120	1252	450	2252	225	Extension for reply within second month		1253	1020	2253	510	Extension for reply within third month		1254	1,590	2254	795	Extension for reply within fourth month		1255	2,160	2255	1080	Extension for reply within fifth month		1401	600	2401	250	Notice of Appeal		1402	500	2402	250	Filing a brief in support of an appeal		1403	1000	2403	500	Request for oral hearing		1452	500	2452	250	Petition to revive - unavoidable		1453	1500	2453	750	Petition to revive - unintentional		1462	400	1462	400	Petition fee under 37 CFR 1.17(f)		1463	200	1463	200	Petition fee under 37 CFR 1.17(g)		1464	130	1464	130	Petition fee under 37 CFR 1.17(h)		1807	50	1807	50	Processing fee under 37 CFR 1.17 (q)		1808	180	1808	180	Submission of Information Disclosure Stmt		8021	40	8021	40	Recording each patent assignment per property (times number of properties)		1809	790	2809	395	Filing a submission after final rejection (37 CFR § 1.129(a))		1810	790	2810	395	For each additional invention to be examined (37 CFR § 1.129(b))		1801	790	2801	395	Request for Continued Examination (RCE)	
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SUBMITTED BY		Complete (if applicable)			
Name (Print/Type)	Thomas S. Bucktonline	Registration No. (Attorney/Agent)	37,275	Telephone	(703) 668-8000
Signature		Date	July 21, 2006		

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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.: 10/077,849
 Filing Date: February 20, 2002
 Applicant: Babak HASSIBI et al.
 Group Art Unit: 2611
 Examiner: Lawrence B. WILLIAMS
 Title: CAYLEY-ENCODATION OF UNINTARY MATRICES FOR
 DIFFERENTIAL COMMUNICATION
 Attorney Docket: 29250-000636/US

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(PROPOSED) AMENDMENT UNDER 37 C.F.R. § 1.111


Sir:

In reply to the non-final Office Action mailed March 24, 2006, the following amendments and remarks are submitted under 37 C.F.R. § 1.111. In view of these, Applicant requests reconsideration and further examination culminating in a Notice of Allowance.

Applicants hereby petition under the provisions of 37 C.F.R. § 1.136(a) for a one (1) month extension of time (until July 21, 2006) in which to respond to the outstanding Office Action and include a fee as set forth in 37 C.F.R. § 1.17(a) with this response for such extension of time.

Amendments to the Claims begin on page 2 of this paper.

Remarks begin on page 10 of this paper.

	Claims remaining after Amendment		Highest number previously paid for		Present extra
Total	34	-	34	=	0
Independent	4	-	4	=	0